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AN ACCOUNT OF THE SUCCESS OF Inoculating the SMALL POX in *Great Britain*, for the Year 1724.

WITH A COMPARISON

Between the Miſcarriages in that Practice, and the Mortality of the *Natural Small Pox*.

By JAMES JURIN, M.D. R. S. Secr. Phyſician to Mr. *Guy*'s Hoſpital, and Reader of Anatomy at Surgeons-Hall.

Nec temerè, nec timidè.

LONDON:

Printed for J. PEELE, at *Locke's Head*, in *Pater-noſter-Row*.

a. 1544.

Dr. *JURIN*'s ACCOUNT OF THE SUCCESS OF Inoculating the SMALL POX; For the Year 1724.

[Price Six Pence.]

AN ACCOUNT OF THE SUCCESS OF INOCULATION

OR

AN ACCOUNT OF THE SUCCESS OF INOCULATION

IN

GREAT BRITAIN,

For the Year 1724.

WITH A

DISSERTATION

Between the Miscarriages in that Practice, and the Mortality of the Natural Small Pox.

Inoculating the SMALL POX, &c.

By JAMES JURIN, M.D. R.S.Secr.
Physician to Mr. Guy's Hospital, and
Member of the Colledge of Physicians.

LONDON:
Printed for S. Buckley at the Dolphin in Little Britain.
MDCCXXV.

AN ACCOUNT OF THE SUCCESS OF Inoculating the SMALL POX, &c.

IN my Account of the Succeſs of Inoculation, publiſh'd laſt Year, I declar'd my Deſign of acquainting the Publick with the Progreſs of that Practice, from Year to Year, till it ſhould either be eſtabliſh'd upon a firm and laſting Foot, or

or ſhould be juſtly exploded, on Account of its being found by Experience to be prejudicial to Mankind. I now acquit my ſelf of that Promiſe, and am the more encourag'd to do ſo, from the kind Reception my former Relations have generally met with: Even the Adverſaries of this Practice, as far as I know, allowing that the Account I have given is juſt and fair, or at leaſt none of them having offer'd to bring any Charge of Partiality againſt me, nor having produced any one Inſtance of a Miſcarriage by Inoculation, more than thoſe I had related, notwithſtanding the general Invitation I publiſh'd to that Purpoſe. Indeed, I have been ſo far from erring on that Side, that I have rather given Occaſion to the Friends of Inoculation to complain, that I have inſerted ſome Perſons in the Number of thoſe ſuſpected to have died of the inoculated Small Pox, where, as they contend, there is no Room for ſuch Suſpicion, their Death

being

being manifeſtly owing to other Cauſes. But I choſe rather to tranſgreſs on this Hand, eſpecially as by repreſenting all the Particulars of thoſe Caſes, that had come to my Knowledge, I had put it in the Power of intelligent Perſons to make their own Judgment of them, than to lay my ſelf under a Suſpicion of ſtifling the Truth, by omitting any one Caſe that could poſſibly be thought to turn to the Diſadvantage of that Practice. I ſhall give the Account of the Practice for the laſt Year in the ſame Manner, delivering only the Matter of Fact, without engaging in Diſputes about it. If any Perſon, finding me miſtaken in any Particular, will be pleas'd to ſet me right, I ſhall thankfully receive the Information, and ſhall rectify what is amiſs in the Account: but I muſt deſire to be excuſed from entring into any Controverſy upon this Subject, and hope no Body will blame me, if, conſidering the Manner in which the Diſ-

putes about Inoculation have been carry'd on, I am desirous to keep clear of them as much as possible.

The Reader will perhaps be surpriz'd, that a Practice, which hitherto seems to have so much the Advantage above standing the Hazard of the Small Pox in the Natural Way, should have been so little used the last Year, as appears from the following Account: But the Reason seems to be obvious enough. For People do not easily come into a Practice, in which they apprehend any Hazard, unless they are frighted into it by a greater Danger. This plainly appears from the State of the natural Small Pox and that of Inoculation in *London*, for the 3 Years last past; for as the Small Pox in the natural Way was much less fatal the last Year than in the Years 1722, and 1723; so the Number of Persons inoculated that Year was much less than in the two former. And that this was owing to that Cause,

and

and not to the Practice's declining and growing into Diſcredit, is plain from this preſent Year, in which we have had already a conſiderable Number of Perſons who have undergone this Operation, from the Allarm, as I ſuppoſe, occaſioned by the Small Pox in the natural Way, which has been for ſome Time very mortal. And the ſame Remark may be made with Regard to Towns in the Country, where ſcarce any Perſon has ventur'd upon Inoculation, unleſs when the natural Small Pox has made a great Ravage in the Neighbourhood; ſo much more are we influenc'd by our Fears of a preſent Danger, than by the Apprehenſion of a remote One. For otherwiſe, I ſuppoſe, it would be more prudent to undergo Inoculation at a Time, when the natural Small Pox is the moſt favourable, than in a Seaſon, when either from the Conſtitution of the Air, or the Species or Degree of Infection, which then prevails, the Diſtemper is more than uſually epide-

mical and mortal; for it is, I think, to be apprehended, that when this Diſtemper is the moſt fatal in the natural Way, it may be leſs favourable, even when given by Inoculation, than in another Seaſon, and a different Conſtitution of the Air; at leaſt there will be leſs Hazard of an Infection already taken, in the one Seaſon than in the other. For that the Infection may be received into the Body, and yet the Party continue for ſome Days, as a Week or more, ſeemingly healthful, appears plainly from what is obſerv'd in the Practice of Inoculation; when we often ſee ſeven or eight Days to paſs after the Operation, not only before the Small Pox come out, but even before the leaſt Degree of Sickneſs or Diſorder appears in the Patient. And who can ſay it is not ſo after the Infection of the natural Small Pox is received into the Body? There are at leaſt ſome Inſtances of Perſons inoculated, where there is very little Reaſon to doubt of their having been

infected

infected, tho' no Symptom of it then appear'd, before the Operation was perform'd. And how ſhall we know, till Experience farther informs us, whether we do not add to the Danger of the Diſtemper, when we give a new Infection by Inoculation, to one who has already received the Contagion in the natural Way?

But waving theſe Matters of Speculation, I proceed to the Continuation of my Account to the End of the laſt Year; and as what I have all along propos'd, has been a Compariſon between the Danger of the Natural and Inoculated Small Pox, I ſhall proceed in the Method I took before, and ſhall firſt give ſome Additions to the Numbers already publiſh'd, of thoſe that underwent and died of the natural Small Pox, before I come to ſpeak of thoſe that were inoculated for that Diſtemper.

	Sick of the Small Pox	Died
By the former Account,	14823	2417
At *Shaftsbury* —	660	100
Dedham near *Colchester* —	339	106
Plymouth —	188	32
	16010	2650

It were to be wiſhed, that we had more of theſe Accounts taken by careful Perſons, by an exact Enquiry from Houſe to Houſe; but in the mean Time, conſidering the Number of Places this Account is taken from, in different Years, and different Seaſons of the Year, with the Largeneſs of the total Numbers, I imagine we cannot greatly err, if we determine the Danger of dying of the natural Small Pox to be that of one in ſix, or thereabouts, as appears by this Computation.

The

The Number of Perſons inoculated the laſt Year, as far as I have been able to collect it, is as follows, taking in four Perſons inoculated the Year before, which came too late to Hand to be inſerted in my laſt Account.

Inoculated in *London*,

By *Claudius Amyand*, Eſq; Principal and Serjeant Surgeon in Ordinary to his Majeſty, 11

By Mr. *Maitland*, Surgeon, (beſides 9 inoculated at *Hanover*, not inſerted in this Account,) 4

Mr. *Pemberton*, Surgeon, —— 3

Mr. *Cheſelden*, Surgeon, by the Direction of Dr. *Plumptre*, 1

Mr. *Pawlett*, Surgeon, —— 1

At *Norwich*,

By Dr. *Howman*, —— 2

By Dr. *Offley*, —— 1

At *Ipſwich*,

By Dr. *Beeſton*, —— 3

At

At *Sevenoake*,

By Mr. *George Lake*, Sen. Surgeon, 3

At *Winchester*,

By Mr. *Goodwin*, Apothecary, — 1

At *Shaftsbury*,

By Mrs. *Dorothy Ringe*, — 2

At *Ottry* St. *Mary*, *Devonshire*,

By Mr. *Skinner*, Apothecary, — 6

At *Plymouth*,

By Mr. *Tolcher*, under the Care of Dr. *Oliver*, — 2

Total 40

The

The following Table contains the several Ages of the Patients, with the Success of the Operation, in the same Manner with that I publish'd last Year.

Age.	Persons inocu-lated.	Had the Small Pox by Ino-culation.	Had an imper-fect Sm. P. by Inoculation.	No Effect.	Suspected to have died of Inoculation.
Under 1 Year.	0	0	0	0	0
1 Y to 2.	0	0	0	0	0
2 to 3	3	3	0	0	0
3 - 4	2	2	0	0	0
4 - 5	2	2	0	0	0
5 - 10	11	10	0	1	0
10-15	4	3	0	1	0
15-20	7	7	0	0	0
20, &c.	9	9	0	0	1
Age un-known.	2	2	0	0	0
Total	40	38	0	2	1

By

By the Account I publiſh'd laſt Year, it appears, that of 443 Perſons, who receiv'd the Small Pox by Inoculation, there were nine ſuſpected to have died of it; and conſequently, the Hazard of dying of it, allowing all theſe 9 to be fair Caſes, was reckon'd to be that of one in 49; and in this Table we have one Perſon out of 38, ſuſpected to have died of the inoculated Small Pox. If all theſe be reduced to an Average, we ſhall have ten Perſons ſuſpected to have died of Inoculation, out of 481, and conſequently this Hazard may be eſtimated to be that of one in 48: Which is the utmoſt that is pretended to by the Oppoſers of this Practice; whereas in the natural Way it is that of one in 6.

The Caſes of thoſe nine Perſons were publiſh'd in my laſt, and I ſhall here give the Caſe of this one, as it is contain'd in a Letter from the learned Dr. *Fuller*, Phyſician at *Sevenoake* in *Kent*, to Sir *Hans Sloane*, Bar.

To Sir Hans Sloane, *Bar.*

Honoured Sir,

I Delayed my Anſwer to yours till now, becauſe it was neceſſary to get what Information I could of Mr. *George Lake*, ſenior, Surgeon, that inoculated, the Nurſe that attended, and a Man that underwent the ſame Operation, and was with him all the Time.

William Jeffery of *Sevenoake* in *Kent*, was about 25 Years of Age, naturally of a good Conſtitution; but had broken it by giving himſelf up to drinking Strong Beer, and (as I think) Spirits, which occaſioned frequently Pimples in his Face, and render'd him ſubject to a Cough, Shortneſs of Breath, inflammatory Diſtempers in his Breaſt, Stitches and Rheumatic Pains; add to all this, it's ſaid, that never any of his Blood, that had the Small Pox, recovered.

He came from *London* thirteen Days before Inoculation, and it's very likely had both heated his Blood, and also taken Infection; for ſome Days before the Operation, he felt Anguiſh Shiverings, Uneaſineſs, and Shootings in his Limbs; which he would not make known (as he afterwards confeſs'd) for fear he ſhould not be inoculated.

28 *Oct. Wedneſday*, towards Night, (having not been let Blood, vomited, or purged,) he was inoculated, together with another Man, and his Child, of about 7 Years old; both which, after Eruption, paſſed their Small Pox, without any Sickneſs at all.

29. *Thurſday*, he walked 3 Miles to an Alehouſe to drink Strong Beer, and back again that Evening. The ſame Night he felt Anguiſh, and Shiverings.

30. *Friday*, in the Night, he had ſome Gripes, and two looſe Stools; but never had any more.

31.

31. *Saturday*, he walked to the ſame Alehouſe and back again, on the ſame Errand.

2. *Nov. Monday*, he rode on Horſe-back to drink, as before, at the ſame Alehouſe.

6. *Friday*, he grew ſick, vomited, but not much, felt great Pains in his Limbs, and ſuch violent Ones in his Back, that he could not go, no nor ſtand upright.

8. *Sunday*, the Pocks ſhewed themſelves, chiefly near the inoculated Places, and in his Face.

9. *Monday*, they broke out in great Numbers, and among them ſome Purples.

10. *Tueſday* Morning I ſaw him, (but never before nor after,) then they had filled not only his Face, but his whole Body all over; and among them were interſperſed (eſpecially on his Hips) innumerable (not very ſmall) flat Spots, of a light fiery Purple Colour, ſuch as are ſeen in the Bleeding Small Pox. Theſe elevated a

loſe it towards the laſt; but never changed Colour till a Day or two before Death; and then they became of a dusky Blew, inclining to Blackiſh.

The other *Variolæ* cluſtered a little in his Face, grew not out much, had no Redneſs at their Roots, never ſwelled, nor tended to any Ripeneſs.

11. *Wedneſday*, he began to ſpit, but that continued but a Day or two, and then went off again. During his whole Sickneſs, he ſeemed not perfectly ſenſible, and had very little Sleep.

13. A Fever (which had not ſhewed itſelf before) roſe a little, but came to no great Height; his Urine came away involuntarily.

14. Bliſters, with clear Water in them, broke out upon his Wriſts and Hands, as big as Filbirds.

16. *Monday*, he died.

SIR,

MY Opinion I ſubmit to your Judgment; but my Thoughts are that

that he had a mild Sort of Small Pox by Inoculation; and almoſt a bloody Sort by Infection and Ill-management of himſelf, which took away his Life.

That a Perſon may have two Sorts at the ſame Time, I know by Experience.

I was with one who had a confluent Species broke out on *Saturday*, and a diſtinct on *Tueſday* following; and both continued and held diſtinguiſhable to the laſt; and the Perſon with great Difficulty recovered. The youngeſt Brother of the Lord *Weſtmorland*'s had likewiſe two Crops of two Sorts: I was with him, but he died.

A Gentlewoman under my Care, in a flagrant fluxing Pox, lay the 12th Day after Eruption, ſenſeleſs, in Convulſions all over, and with a Pulſe ſo ſuppreſſed, that with all the Attention I could uſe, I could not perceive it move in the leaſt: But that Night a freſh Crop of the diſtinct Kind burſt

out,

out, by which her Senſes returned, and ſhe recovered from that Time. But tho' thoſe *Variolæ* came out in elevated Puſtules, yet they never grew, nor coloured, but went away again in a few Days without breaking Skin.

This Caſe I have taken Care to inform my ſelf of ſo perfectly, that you may depend upon its being all poſitively true. I am,

SIR,

Sevenvake,
Dec. 30. 1724.

Your moſt Faithful,

And moſt Obedient Servant,

TH. FULLER.

How

How far this Perſon's ill State of Health, or his great Irregularity after the Operation, may have contributed to his Death, is ſubmitted to the Judgment of the impartial Reader.

Beſides the Perſons inoculated in *Great Britain*, to which my ſeveral Accounts have hitherto been confin'd, I have receiv'd ſome from other Parts, which at firſt I had Thoughts of inſerting; but the Difficulty I have found in making a perfect Collection of all the inoculated Caſes here at Home, gives me little Inclination at preſent to extend my Account to Countries beyond Sea, where I muſt expect that Difficulty will be much greater; nor indeed is it neceſſary ſo to do, ſince I imagine, the Succeſs of this Practice in *Great Britain* will be ſufficient to determine the Fate of it one Way or the other.

The

The following is inserted at the Desire of Mr. *De Grave*, whose Daughter I have seen, pursuant to his Request, and find the Account he therein gives of her present State of Health, and particularly of her Arms, to be true.

To Dr. Jurin, *Secretary to the Royal Society.*

Berwick-Street, Soho.

SIR, *Apr. 15. 1724.*

I Have lately read a Pamphlet, entituled, *Reasons against the Inoculation of the Small Pox, in a Letter to Dr.* Jurin, *by* Francis Howgrave, *Apothecary*, dated at *Stamford, Nov.* 16. 1724. wherein the Author, Page 60 and 61, thinks proper to call upon me in the following Words, *viz.*

" And

"And though Mr. *Degrave* po-
"sitively asserts in Mr. *Maitland's*
"Book, Page 53, that his Daughter
"got well in eight Days from the
"first Eruption; and Mr. *Maitland*
"backs this Account, Page 27, by
"saying, What Dr. *Wagstaff* says of
"his Fears of a great Class of Hy-
"pothetical Diseases, is all vanished,
"and the Girl is very well: Not-
"withstanding they assert this, yet I
"have this Favour to beg of Mr. *De-*
"*grave* and Mr. *Maitland*, to lay
"their Hands upon their Hearts, and
"inform me, *bonâ fide*, whether she
"has not been in a worse State of
"Health since she was inoculated,
"than before? Whether the Arm in
"which she was inoculated is not
"withered? And lastly, Whether
"ther there is not a watry *Ichor* con-
"tinually discharging from it? When
"they are pleased to answer these
"few plain Questions, they may
"perhaps know the Reasons why I
"ask them.

Sir, In anſwer to all theſe Queries, I ſay, they are entirely groundleſs; for my Daughter's Health is, and hath been, ever ſince I wrote her Caſe to Mr. *Maitland*, perfectly good, her Arms being whole and ſound, and ſo far from being withered, or from diſcharging any *Ichor*, that they are grown in Proportion to her Body, and are as fleſhy, and as ſtrong, and free from any Humour or Diſcharge whatever, as they were before the Inoculation; nor is there, I verily believe, a Perſon of 15 Years of Age, more grown in Stature and in Strength than ſhe has done within theſe three Years. I would have ſent you, Sir, an Affidavit of this, could I have thought it had added to the publick Satisfaction; but my Daughter having been viſited by Hundreds, and this being a Thing Mr. *Howgrave* could ſo eaſily have been ſatisfied in, 'tis very ſtrange he would not be at ſome Pains in a Caſe he has made ſo many Inferences from; I therefore

cannot

cannot but wonder, that I, who (as a Surgeon) can have no Intereſt in ſpeaking in Favour of Inoculation, (being I never inoculated any,) ſhould without any Cauſe given, be called upon in a Manner that attaints my Honour and Veracity; and that Mr. *Howgrave* ſhould think himſelf authoriz'd thus to vilify and abuſe me in Print, for having ſtated and repreſented my Daughter's Caſe, *bonâ fide*, in ſuch Manner as it has appear'd to me, and to very many of the Faculty, and other curious and candid Perſons, who have conſtantly attended and frequently viſited her, both when ſhe was inoculated for the Small Pox, and ſince her Recovery of that Diſtemper. The Singularity of her Caſe having excited the Curioſity of Numbers, as well of thoſe who, having been Eye-Witneſſes of what had appear'd on her during her Confinement after the Inoculation, did atteſt that ſhe had had no Small Pox then, or any thing like it, as of thoſe who had receiv'd for Truth a fabulous Story ſpread abroad, and recorded in

Dr. *Wagſtaff*'s Book, *viz.* That my Daughter had had the Small Pox twice, that is, once during her Confinement after the Inoculation, and by Infection in the natural Way in eleven Weeks after the Inoculation. I muſt confeſs I do not underſtand what Mr. *Howgrave* means, when he ſays, "That if Mr. *Maitland* and I are "pleaſed to anſwer the three plain "Queſtions above-mention'd, we may "perhaps know why he asks them." But ſure, it is evident, I have not deſerv'd being us'd ill for having aſcertain'd the Truth, but rather ſhould have been commended by that Perſon, who quoting your Words, Page 24, ſays, "That, to impoſe upon the "World in any Particular, is diſin-"genuous and baſe; but to deceive "them in an Affair ſo nearly con-"cerning the Lives of Mankind, is "a Wickedneſs worthy of the utmoſt "Abhorrence and Deteſtation." 'Tis to be hoped this Lover of Truth, and impartial Writer, has obſerved this Rule, and therefore will be pleaſed to give the Publick the Satisfaction

tion of producing the Vouchers he has grounded his plain Queries upon, being he says, Page 53. "When this "or any other of my Accounts are "call'd in Question, I shall be ready "to produce my Vouchers." This the World expects of him, and the more, because it does not appear that Mr. *Howgrave* has made good even this Part of his Title-Page, where he declares that he makes "a full An-"swer to every thing that Mr. *Mait-*"*land* and others have advanced upon "that Subject, or that he has taken any "Pains to know my Daughter's Case;" tho' he says, Page 63. "I wish it had "been as much in my Power as it is "in my Inclinations to have set this "Controversy in a still clearer Light, "which I would have done, had se-"veral Persons had as much Honour "to acknowledge the Misfortunes "they suffer'd to be brought upon "them by this Practice, as others "have been ready to certify the Suc-"cess of this Method:" For had this Gentleman exerted his Power, and used Endeavours pursuant to his

Incli-

Inclinations to know my Daughter's Caſe, 'tis hardly credible, that a Caſe which has made the Talk of the Town for ſome Years paſt, and has excited the Curioſity of ſo many, had eſcaped his Knowledge; for, as Archbiſhop *Tillotſon* (Sermon 139) rightly obſerves, "a Man may for once be "impoſed upon by an Illuſion of "Fancy, in a Thing which he vio-"lently deſires or expects, and which "runs ſtrongly in his Mind; but "when there is Time to examine "Things and compare Circumſtances "together, and to look narrowly "into them, and to try them by ſe-"veral Senſes and at ſeveral Times, "for ſo long a Space, it is morally, "nay almoſt naturally, impoſſible, "that any one in his Senſes, much "more ſo many Hundreds of Perſons, "ſhould in ſuch Circumſtances be "groſsly deluded in a plain ſenſible "Matter of Fact." To conclude, ſhould Mr. *Howgrave* decline to ſet this Controverſy in a ſtill clearer Light, now I have had *ſo much Honour as to acknowledge the Misfor-*

tunes

tunes brought on my Daughter by this Practice, I ſhall expect, if his Story of my Daughter's wither'd Arm, *&c.* improves, (as much as the Report of their Highneſſes being in the ſame Condition has, notwithſtanding the greateſt Evidence to the contrary,) that the intereſted Oppoſers of Inoculation will ſoon ſpread abroad, that wither'd Arms, perpetual running Sores, and perhaps cloven Feet, are the ſure and conſtant Effects of Inoculation; and that the Horn upon the Woman's Head, that is now ſhewn in Town, ſprung from Inoculation. I am,

SIR,

Your moſt Humble Servant,

ISAAC DEGRAVE.

P. S. I beg the Favour of you to print this in your Account of the inoculated Small Pox; but I hope that before, you'll give me Leave either to bring my Daughter to you, or that you will be pleas'd to call upon her, that you may be convinced of the Truth.

FINIS.

ADVERTISEMENT.

ALL Persons concern'd in the Practice of inoculating the Small Pox, are desir'd to keep a Register of the Names and Ages of every Person inoculated, the Place where it is done, the Manner of the Operation, the Days of sickening and of the Eruption, the Sort of Small Pox that is produc'd, and the Event.

Where the true Small Pox is not produc'd by Inoculation, it will be of Use to take particular Notice, whether the Patient had any other Kind of Eruption, what Symptoms preceded or attended it, whether the Incisions inflam'd and run, and for what Time their Running continu'd.

In Case any Person shall happen to die after Inoculation, either in the Course of the Small Pox, or after they are gone off, it is desir'd that a particular Relation of the Case may be made, and attested, if it be judg'd necessary, by the nearest Relations of the Party deceas'd, or by other credible Persons, that were Witnesses to the Fact.

They are intreated to send these Accounts, or an Extract from them, comprehending all Persons inoculated from the Beginning, to the End of the present Year, to Dr. *Jurin*, Secretary to the Royal Society, some Time in *January*, or at farthest in *February* next, that so the Result of them may be publish'd early in the Spring.

Lincolns-Inn-Fields,
May 12. 1725.